

R E M A R K S

Claims 98-103, 105 and 114-120 are pending in the present application. Claim 98 has been amended. Claims 114-120 have been cancelled. Claim 121 is new. Support for the amendment to Claim 98 may be found in the specification at page 109 lines 1-12, page 117, line 29 – page 118, line 12, and in Figures 50 and 51. Support for New Claim 121 may be found in original Claim 90, among other places. Both the parent application and this application describe methods and advices for performing cell migration assays. The instant application describes additional embodiments for cell migration assays, including the use of particular cell seeding device embodiments for confining cells to a predetermined area in a well. Related U.S. applications and issued patents are as follows: 7,018,838; 11/342,413; 11/890,740; and 12/195,007.

The following rejections are at issue:

1. Claims 98-103, 105, and 114-120 are rejected under 35 USC 112, first paragraph, as allegedly failing to comply with the written description requirement;
2. Claims 98-101 and 103-105, 114-117 and 119-120 are rejected under 35 USC 103 as being obvious over U.S. Appl. No. 2008/0187949 (Goldbard) in view of U.S. Pat. No. 6,171,780 (Pham); and
3. Claim 102 and 118 are rejected under 35 USC 103 as being obvious over U.S. Appl. No. 2008/0187949 (Goldbard) in view of U.S. Pat. No. 6,171,780 (Pham) and WO 99/63329 (Abbott);

These rejections are addressed in order below.

1. The claims have adequate written description

Claims 98-103, 105, and 114-120 are rejected under 35 USC 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicants

respectfully disagree. Nevertheless, Applicants have amended the claims to delete the phrases objected to by the Examiner. Support for the new step is found in the specification at page 109, lines 1-10, which provide:

In this embodiment, cells are seeded centrally onto a distinct cell seeding area. In some embodiments, the cells are seeded using a specifically designed cell seeding device described below that constrains the distribution of cells to a discrete location within the analytic zone (such as the center of a single well of a 24, 96, 384 or 1536 multiwell plate). After initial incubation in the presence of the cell seeding device to allow for cell attachment (time dependent on culture conditions and cell type), the cell seeding device is removed and nonattached cells gently removed by irrigation. The substrate with attached cells is then incubated again (time dependent on culture conditions and cell type) and the migration of cells outward from the initial cell seeding area determined using the programmed sensing elements and analytic software.

Accordingly, Applicants request that this rejection be withdrawn.

2. Claims 98-101, 103-105, 114-117 and 119-120 are not obvious

Claims 98-101, 103, 105, 114-117 and 119-120 are rejected under 35 USC 103 as being obvious over U.S. Appl. No. 2008/0187949 (Goldbard) in view of U.S. Pat. No. 6,171,780 (Pham). Applicants respectfully disagree. A *prima facie* case of obviousness requires the Examiner to cite a combination of references which (a) disclose the elements of the claimed invention, (b) suggests or motivates one of skill in the art to combine those elements to yield the claimed combination, and (c) provides a reasonable expectation of success should the claimed combination be carried out. Failure to establish any one of these three requirements precludes a finding of a *prima facie* case of obviousness, and, without more, entitles Applicant to allowance of the claims in issue. In addressing this rejection, Applicants focus on the independent claims since non-obviousness of an independent claim necessarily leads to non-obviousness of claims dependent therefrom. The cited references do not teach element of the claims.

The previously pending claims referred to a cell seeding device. The Examiner states that “It is conventional in the art to transfer cells and apply them to wells with commercially available pipettes and such devices will not be further considered.” Apparently, the Examiner is indicating that a pipette is a cell seeding device within the language of the previously pending claims. Applicants respectfully disagree, but have nevertheless amended the claims to more clearly define the invention.

The claims now refer to an insert configured for use with a multiwell plate. The insert comprises a surface that contacts the bottom surface of the well and has opening therein that exposes the bottom surface of the well to define a predetermined area on the bottom surface of the well when the insert is inserted into the well. An example of this is provided in Figures 51 and 52. Figure 51 shows an insert inserted into a well. The insert contacts the bottom of the well and has an opening that exposes the bottom surface of the well to and constrains the cells to a discrete location within the well.

The insert and use thereof being claimed is clearly distinguishable from a pipette. Applicants are unaware of any pipette that comprises a surface that contacts the bottom surface of the well and has opening therein that exposes the bottom surface of the well to define a predetermined area on the bottom surface of the well. This distinction is further supported when the other claim limitations that define how the insert is used are considered. The claims state that the insert is inserted into the wells and then the cells are seeded. When the insert is removed, the cells are confined to a discrete location within the well defined by the opening in the insert. Applicants are unaware of any pipette that works this way, i.e., is left in a well during cell seeding, or the use of which results in confinement of cells in a predetermined area defined by the opening.

Goldbard and Pham certainly do not. Goldbard (in paragraph 52 cited by the Examiner, and in Figures 1, 2, and 3) describes a system where a membrane is suspended within a well and thus over the bottom surface of the well and the cells are seeded on the membrane and not the bottom surface of the well. The cells placed on the membrane in Goldfarb migrate from the membrane to the bottom surface of the well. Thus, Goldbard does not teach 1) the insert as claimed, 2) the step of inserting the insert into at least one well of said multiwell plate, wherein said insert contacts said bottom surface of said well to constrain the cells in a discrete location within the well, or 3) removing the insert, wherein the cells are confined to the discrete location. Pham does not cure this defect. Pham does not disclose any method for confining cells to a predetermined area on the bottom surface of a well so that migration outside of the predetermined area can be assayed.

For the foregoing reasons, Applicants respectfully request that this rejection be withdrawn.

2. Claims 102 and 118 are not obvious

Claim 102 is rejected under 35 USC 103 as being obvious over U.S. Appl. No. 2008/0187949 (Goldbard) in view of U.S. Pat. No. 6,171,780 (Pham) and WO 99/63329 (Abbott). Abbott does not cure the defects noted for the combination of Goldbard and

Pham. In particular, Abbott does not disclose any method for confining cells to a predetermined area on the bottom surface of a well so that migration outside of the predetermined area can be assayed. Accordingly, Applicants respectfully request that this rejection be withdrawn.

CONCLUSION

All grounds of rejection and objection of the Office Action of June 28, 2010 having been addressed, reconsideration of the application is respectfully requested. It is respectfully submitted that the invention as claimed fully meets all requirements and that the claims are worthy of allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicant encourages the Examiner to call the undersigned collect at (608) 662-1277.

Dated: September 27, 2010

/Mitchell Jones/
Mitchell Jones
Registration No. 44,174

CASIMIR JONES, C.C.
2275 Deming Way, Suite 310
Middleton, WI 53562